

**MODEL I / MODEL III**

# **IN-MEMORY INFORMATION SYSTEM**

**CAT. NO.  
26-1508**

**Radio Shack TRS-80 SOFTWARE**

TM

**CUSTOM MANUFACTURED IN USA BY RADIO SHACK, A DIVISION OF TANDY CORP.**

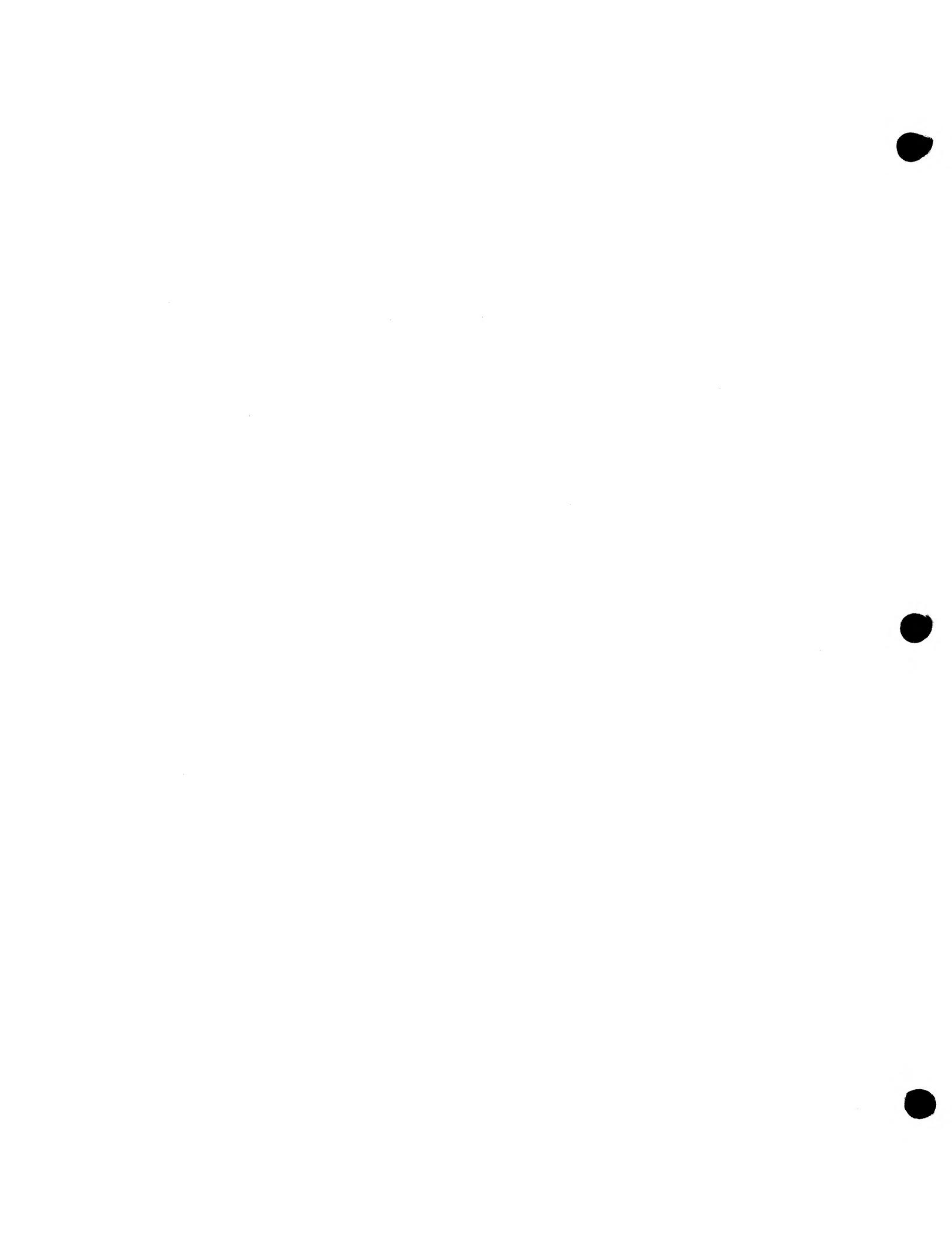


## ADDENDUM FOR IN-MEMORY INFORMATION SYSTEM

Page 1 - Add the following sentence to the end of the first paragraph.  
(Optional) 80 Column Printer with proper connecting cable.

Page 5 - Add the following sentence at the end of the Note (under the NAME section). No more than 14 lines can be used when setting up your system. If you use more than 14 lines, an error message, TOO MANY LINES, will appear on the screen.

Page 5 - Add the following paragraph after the LENGTH section.  
Note: Card Length cannot exceed 255 characters. If you exceed the 255 characters maximum, an error message, LENGTH ERROR, will appear on the screen.



# In-Memory Information System

**Radio Shack®**

 A DIVISION OF TANDY CORPORATION  
FORT WORTH, TEXAS 76102

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## Introduction

The Radio Shack In-Memory Information System allows you to create, store, retrieve, modify and sort any type of data you specify. It virtually replaces any card or index file. Example files would be, inventories, personnel files, recipe files, customer records, reservation lists and anything else you may need a file for. It is designed for use on 16K Model I and Model III computers with Level II BASIC. See "Limitations for capacity versus memory size.

There are three programs in the In-Memory System. They are as follows:

1. SETUP — This program sets the system up by entering all the data necessary for your file.
2. SORT — This program can be used to sort the data into alphabetic or numeric order. Also, this program allows you to print all your data on paper.
3. INFO — Allows review, deletion, addition and changing of data.

You will find the three program package is easy to use and provides versatility and speed.

## Limitations

The amount of data that can be stored is limited by the memory capacity of the computer. 32K computers have about twice as much resident memory as 16K computers. Extensive data files can be stored on tape if the entire file cannot be contained in the computer at one time. This can be time consuming when working in large data files. A 16K machine stores about 13600 characters of information.



# Loading Instructions

## Loading Instructions

### Model I/III – Level II

If you are using a system with a disk drive, hold the **BREAK** key down while powering up the system. Make sure your cassette program tape is rewound, and the "PLAY" key is down on the recorder.

The screen will show:

Cass? (Model III only)

Memory Size?

READY

\*?

\*?

You type:

**L** and press **ENTER**

Press **ENTER**

**S Y S T E M** and press **ENTER**

Program Name (**S E T U P**, **I N F O**, or **S O R T**), and press **ENTER** (See Note below.)

**7** and press **ENTER**

### Caution:

### Model III Users Only

Extreme caution should be exercised when executing the slash (/) **ENTER**. Failure to release the **ENTER** key quickly will result in turning the cassette on and the program will not function. If program does not function, then repeat the loading instructions.

Note: If **C\*** appears in the upper right corner of the screen, turn the computer off, then repeat the loading instructions. Turn up the cassette volume a little.

After the program is loaded, take the program tape out and put in a blank cassette to be used as a Data Tape.

## Definitions of In-Memory Terms

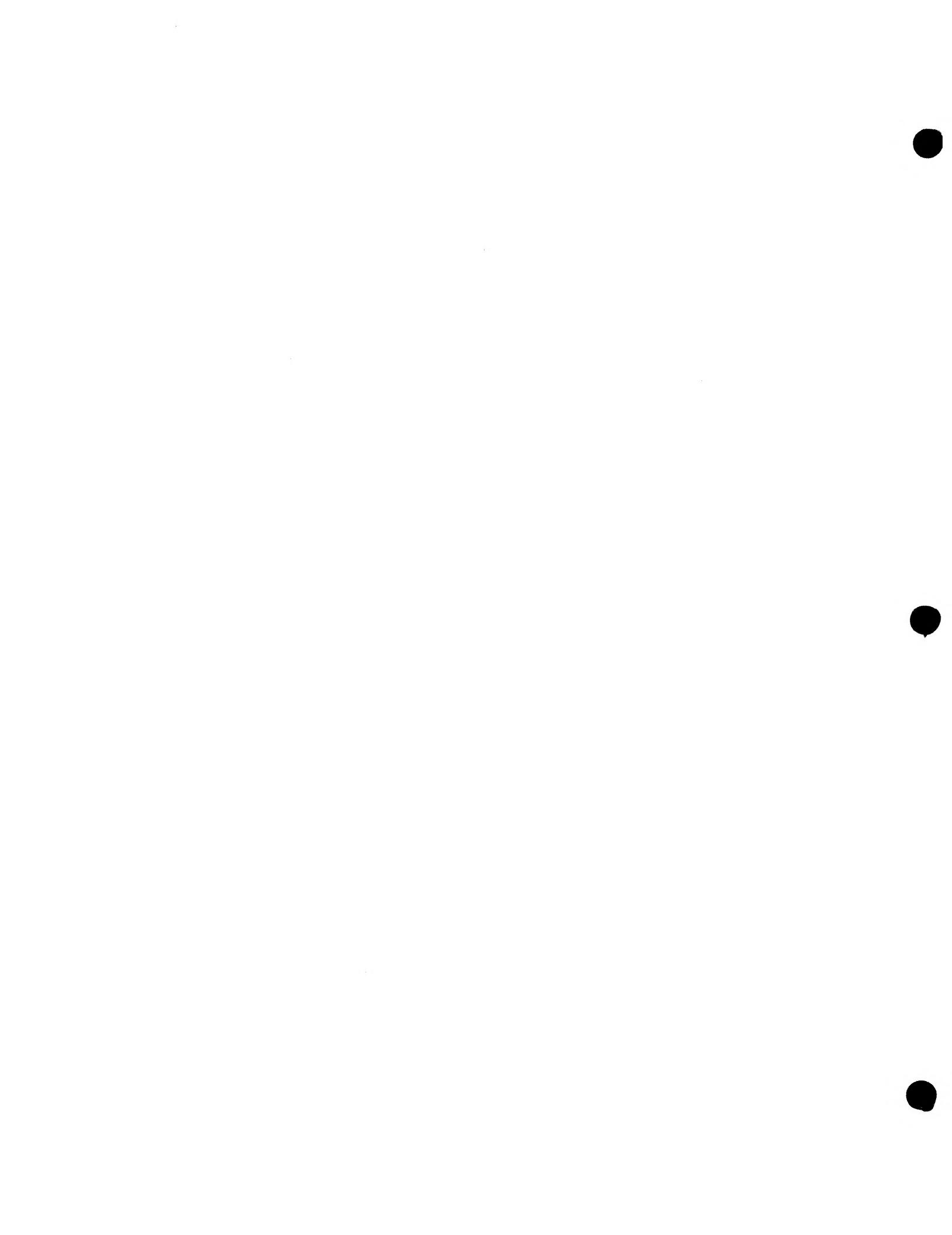
Card — The files in this program are split into cards. A card can be compared to an index card.

Line — Each row in a card is called a line.

Line Name — The title of each line is called a line name.

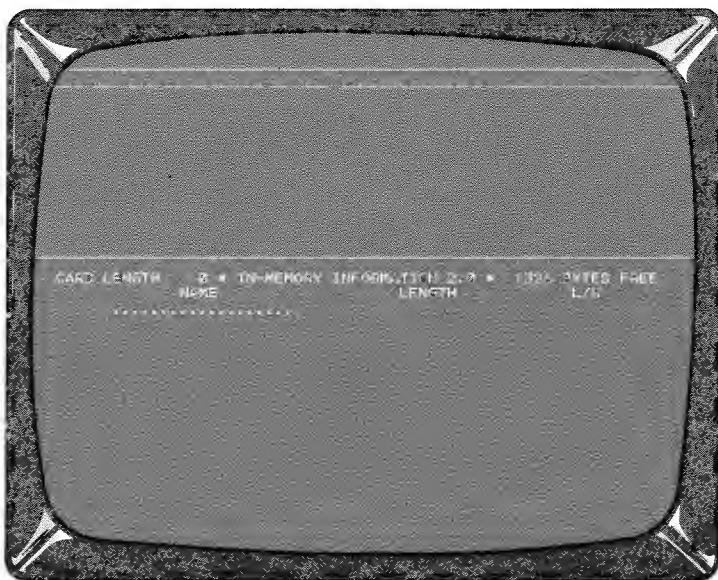
Data — The actual information on each line is called data.

LAST NAME	HOLSTON
FIRST NAME	GREG
ADDRESS	21ST ST.
AGE	24



## Setup

The screen will show:



What each option does:

NAME — In order to setup this system, you must enter the line name of your data. This will enable you to give each line a category. (Example: NAME, ADDRESS, SALARIES, STOCK NUMBERS, etc.) After you have typed in the line name, press **ENTER**.

Note: A line name can be 1 to 20 characters long and can contain any combination of keyboard characters (including spaces).

LENGTH — You must tell the computer the maximum length of the line for your data. The program will fill the rest of the line with spaces if you don't use every space in the line. A line can have from 1 to 41 characters. After you type in the line length, press **ENTER**.

L/R — L fills the line with spaces on the right and R fills the line with spaces on the left. L stands for "Left-justified", and R stands for "Right-justified". You don't have to press **ENTER** after typing **R** or **L**. (Pressing **ENTER** is the same as pressing **L**.)

## Setup (continued)

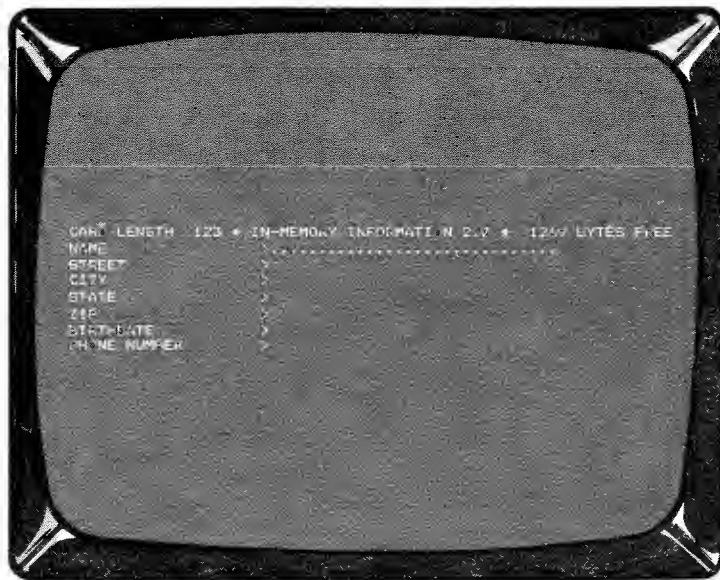
For example, let's assume you need a list of all your friends' and relatives' addresses for birthday and Christmas cards. The first thing to do is decide what kind of information you want in your file. You need the person's name, address, (street, city, state, zip), birthdate, and maybe even a phone number. Then you need to decide how long each line should be.

For instance, NAME may need 30 spaces and STREET would need room for 35 letters. The last thing you need to decide is whether you want the line spaces filled in on the left or right.

NAME	LENGTH	L/R
NAME	30	L
STREET	35	L
CITY	25	L
STATE	10	L
ZIP	7	L
BIRTHDATE	8	L
PHONE NUMBER	8	L

When you have entered all your line names, press **BREAK**.

The screen will show:



Now you can enter the data for your file. Type in the correct data by each line name and press **ENTER**. After you fill in all the lines on the screen, the list will reappear.

## Setup (continued)

Remember the data is divided up into sections similar to that of a index card.

**Note:** If the BYTES FREE value drops below the CARD LENGTH value, you can't add any more records.

When you are through entering data, press **(BREAK)**.

The screen will show four options. They are as follows:

(A)DD MORE DATA — Press **A** to go back and add more data.

(W)RITE TO TAPE — Press **W** to save the data on tape. You must do this or you will lose all your data. The screen will show: READY CASSETTE, PRESS **<ENTER>**. Model III users have the option of saving data at high speed by pressing **H**, or pressing **L** (for low speed compatibility with Model I computers). Insert the data tape, rewind it, then press the "RECORD" and "PLAY" keys on your tape recorder and press **ENTER**. When you finish recording the data on tape, In-Memory will return to the menu.

**Note:** Make two copies of your data. This gives you a "backup" copy in case anything goes wrong with the original tape.

(R)ESTART PROGRAM — Press **R** to restart the Setup program. You can set up more than one type of data at one time.

(X) EXIT TO BASIC — Press **X** to exit the program. Always end your program with the **X** command. Never exit by pressing Reset.

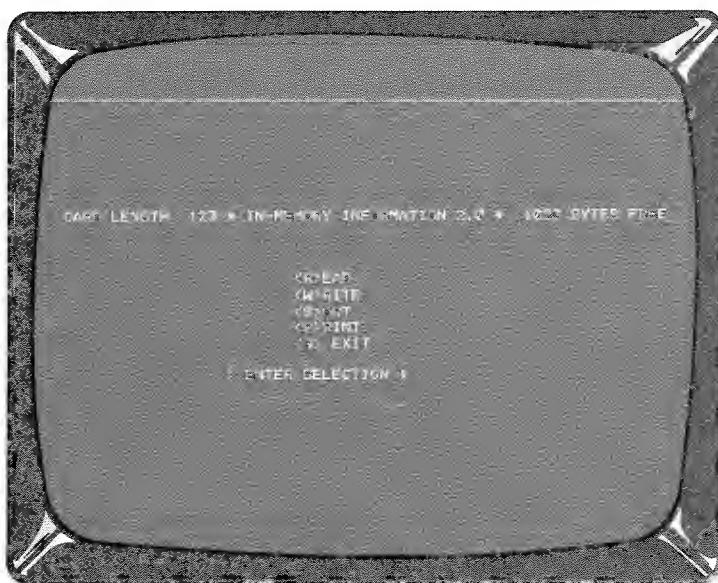
**Note to Model I Users Only** — If you have an Expansion Interface, hold down the **BREAK** key and press **X** to exit the program. If you decide you don't want to use an option, you may press **BREAK** to get back to the menu.



## Sort

Load the program exactly as you did for Setup. The screen will show: READY CASSETTE, PRESS **ENTER**. Remove the Program from the recorder and insert the data tape. Rewind your tape, press "PLAY" on your tape recorder and press **ENTER**. (Model III users must select **H** or **L**, whichever was selected previously.) The Sort menu will appear.

The screen will show:



Press **S** for Sort. This option will put your file in alphabetic or numeric order.

The screen will show:

SORT ON WHICH LINE?

(A)SCENDING OR  
(D)ESCENDING SORT

You type:

Choose the line name you wish the file to be alphabetized under and press **ENTER**. (Example: NAME, ADDRESS, AGE, etc.)

**A** for Ascending (1, 2, 3, or A, B, C)  
and press **ENTER**

**D** for Descending (3, 2, 1, or C, B, A)  
and press **ENTER**

The program will automatically put the cards in order and will return to the menu.

## Sort (continued)

Press **R** for Read. This option allows you to combine a file that you may have previously split. The screen will show: READY CASSETTE, PRESS <ENTER>. Rewind the second data tape, press "PLAY" on your tape recorder and press **ENTER**. The Sort program will automatically combine the files and the Sort menu will appear on the screen.

Press **W** for Write. This option lets you split the cards when the data gets too large for memory. (You can split your cards only if you have done a Sort. Write also lets you save your data on tape.)

**The screen will show:**

**You type:**

DO YOU WANT TO SPLIT YOUR  
CARDS (Y/N)?

**(Y) or (N)** and press **ENTER**

If you pressed Y for Yes,

**The screen will show:**

FIRST CHARACTER OF NAME?

First letter of file name (Ex: **J** for Jones)

The screen will show how the file was split.

Example: THERE ARE 2 CARDS IN PART 1  
THERE ARE 3 CARDS IN PART 2

The program will ask you if the way the file is split is okay. Press **Y** for Yes or **N** for No. If you press N for No, the screen will return to the first question. If you press Y for Yes, the screen will show: WRITE PART <1> OR <2> OR <@> IF DONE)?

You can now save the data on tape. Press **1** to save the first half of the file. Press **2** to save the second half of the file. Press **@** when you are done, and the program will return to the menu.

If you did not split your data (or if you pressed 1 or 2 to save your data on tape), the screen will show: READY CASSETTE, PRESS <ENTER>. (Model III users must select **H** or **L**.) You will now save your data by rewinding the tape, then pressing the "RECORD" and "PLAY" keys on your tape recorder and pressing **ENTER**. The program will automatically return to the menu when finished recording the data on tape.

## Sort (continued)

Press **P** for Print. This option will print the cards out on paper. Make sure your printer is on before pressing **P**. If it isn't on, the message, PRINTER NOT READY will appear. To stop printing, or if you get an error message, hold down the **BREAK** key until the menu appears.

When you are through with the Sort program, press **@** for Exit, then press **X** to Exit to the program. (Model I users with an Interface must use **BREAK** **X**.) Always exit the program in this manner. Do not press Reset.



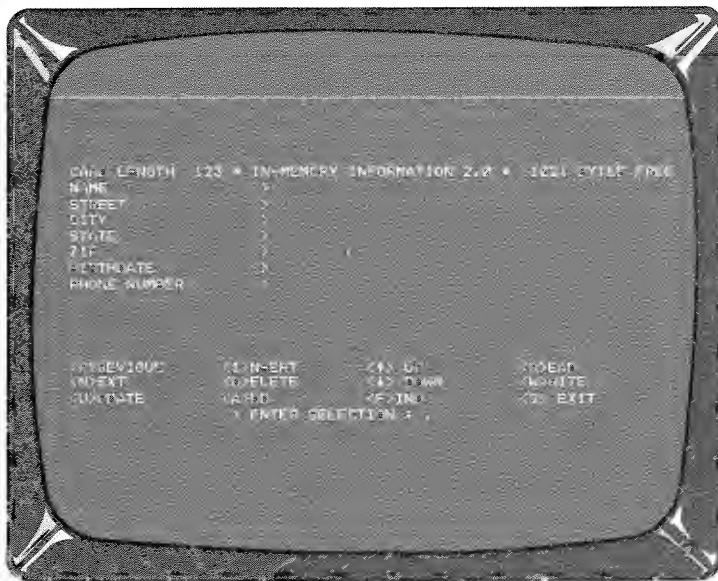
## Info

Load the program exactly as you did for Setup.

The screen will show:

READY CASSETTE, PRESS <ENTER>

Rewind your data tape and press "PLAY" on your tape recorder and press **(ENTER)**. (Model III users must select **(H)** or **(L)**.) The first card and the Info menu will appear on the screen.



What each menu option does:

(P)REVIOUS — Pressing **(P)** will allow you to move the cards backwards.

(N)EXT — Pressing **(N)** will allow you to move the cards forward.

(U)PDATE — Pressing **(U)** will allow you to update a line. The cursor will be on the first line waiting for you to change the line. If you do not wish to change the line, simply press **(ENTER)** and the cursor will go to the second line.

**Note:** If you press **(BREAK)**, you will return to the menu and all changes you have made will be cancelled.

## Info (continued)

(I)NSERT — Insert allows you to insert a new card anywhere you would like. Go to the card that you want the insert to be in front of, and press **I**. The line names will appear with a cursor at the first line. Fill in the information, pressing **ENTER** after each line. If you type **I** and then **BREAK**, before finishing the record, you will end up with a blank line.

(D)ELETE — Pressing **D** will delete the card on the screen. There is no way to recover deleted cards, except by restarting the program and reloading the tape. So be careful.

(A)DD — Pressing **A** will do the very same thing as Insert except the cards are added at the end instead of being inserted in the middle of the file. Press **ENTER** after every line or the card will be erased. Press **BREAK** when finished to return to the menu.

Note: You are allowed up to 14 lines for one card. Only 10 lines appear on the screen.

**↑** — will move the lines up to the top of the card. The **SHIFT** and **↑** key go straight to the first card. The **↑** key can be used whenever UP is displayed on the screen.

**↓** — will show you the rest of the card. The **↓** key can be used whenever DOWN is shown on the screen.

(F)IND — If you have a large file, pressing **F** will help you find a card.

The screen will show:

LINE NAME?

You type:

Line name and press **ENTER**  
(Example: NAME, ADDRESS, AGE, etc.)

NAME?

The first letters or numbers on the line you are trying to find, and press **ENTER**

The screen will automatically go to the card you are looking for. If you did a Find previously, the screen will show: CONTINUE FIND (Y/N)? If you wish to search on the same basis as before, press **Y**. Otherwise, press **N**.

Note: When you press **F** for Find, the option starts looking at the card following the one showing on the screen. The Find option will not read the card showing on the screen since that information is already in front of you.

(R)EAD — Pressing **R** allows you to put together your file if you have previously split it. READY CASSETTE, PRESS <ENTER> will appear on the screen. Rewind your data tape then press "PLAY" on your tape recorder and then press **ENTER** (Select **H** or **L**.) The files will automatically be put back together.

(W)RITE — After you are through changing your data, you will need to update your files on tape. Pressing **W** will allow you to do this. This option works the very same way as the (W)RITE TO TAPE option in the Setup program.

@ EXIT — Press **@** to exit the program. Always exit the program in this manner. Never exit by pressing Reset, as this could cause the computer to hang up. If you do push Reset, you will have to turn the computer off and then on again to reload the program.

**Note:** The top of the screen will show:

CARD LENGTH 63 \*IN-MEMORY INFORMATION 2.0 \* 1054 BYTES FREE.

If the BYTES FREE value drops below the CARD LENGTH value you can't add any more records. In order to Add, Insert, Find, or Update, you will need an opening for at least one more card. If you try to add a card and there isn't any room, the message \*OUT OF MEMORY\* will appear. You will need to go to the Sort program and split your file before continuing.





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**NOTE:** Good data processing procedure dictates that the user test the program, run and test sample sets of data, and run the system in parallel with the system previously in use for a period of time adequate to insure that results of operation of the computer or program are satisfactory.

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